IN THE CLAIMS

8. (New) A method comprising

performing density gradient centrifugation on bone marrow; and

isolating human mesenchymal stem cells from a fraction having a density of 1.050 – 1.070 g/ml.

9. (New) The method according to claim 1, wherein said performing uses an isotonic solution of Ficoll® or Percoll®.

10. (New) The method according to claim 2, wherein said isotonic solution is Percoll® and said density is 1.068 g/ml.

11. (New) A mesenchymal stem cell obtained according to a method of claim 1.

12. (New) A mesenchymal stem cell obtained according to a method of claim 2.

13. (New) A mesenchymal stem cell obtained according to a method of claim 3.

14. (New) A pharmaceutical preparation comprising a mesenchymal stem cell according to claim 4.

15. (New) A pharmaceutical preparation comprising a mesenchymal stem cell according to claim 5.

16. (New) A pharmaceutical preparation comprising a mesenchymal stem cell according to claim 6.

17. (New) A method of manufacturing a pharmaceutical preparation comprising

formulating isolated mesenchymal stem cells according to claim 1 and one or more pharmaceutically acceptable excipient(s) and/or carrier(s).

18. (New) A method of manufacturing a pharmaceutical preparation comprising

formulating isolated mesenchymal stem cells according to claim 2 and one or more pharmaceutically acceptable excipient(s) and/or carrier(s).

19. (New) A method of manufacturing a pharmaceutical preparation comprising

formulating isolated mesenchymal stem cells according to claim 3 and one or more pharmaceutically acceptable excipient(s) and/or carrier(s).

20. (New) A method of isolating mesenchymal stem cells from bone marrow comprising

performing density gradient centrifugation using a solution of Ficoll® or Percoll® with a density of 1.068 g/ml.